



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,133	12/30/2003	David A. Preves	899.076US1	3841
21186	7590	03/16/2007	EXAMINER	
SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.			BRINEY III, WALTER F	
P.O. BOX 2938			ART UNIT	PAPER NUMBER
MINNEAPOLIS, MN 55402			2615	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/16/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/749,133	PREVES ET AL.
	Examiner Walter F. Briney III	Art Unit 2615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 02 January 2007.
- 2a) This action is FINAL.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) 4 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-34 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date: _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date: _____	5) <input type="checkbox"/> Notice of Informal Patent Application
	6) <input type="checkbox"/> Other: _____

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

1. **Claims 1-34 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement.**

The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Specifically, each independent claim—claims 7, 19 and 28—recites, “a housing...structured to mount in or about an ear of a person.” Alleged support comes from page 5, lines 16-20, and page 20, lines 8-11.

Page 5 discloses “a miniaturized housing for use in locations having limited space” and equivocates such a housing with “a hearing aid.” Unfortunately, this fails to rise to an implication of an ear-level hearing aid. First, the term miniature is a relative degree, and is not given any meaningful point of reference in the specification. Second, hearing aids are widely varied, and comprise housings that can be worn in or about an ear as well as housings that are worn on other parts of the body. Sometimes, the hearing aids are not even worn. See, for instance, US Patent 2,017,358.

Page 20 indicates “for a system such as a hearing aid, the functionality of these systems is enhanced through manufacturing these systems with components that can be configured with arrangements that reduce the amount of area and/or volume used by

components required to operate the system." At most, this statement implies that smaller is better in hearing aids, but falls short of specifying the placement of a hearing aid.

Therefore, claims 1-34 recite new matter.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 1-7, 10, 16, 19, 21, 25 and 28-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Penn (US Patent 2,140,969) in view of Cohen et al. (US Patent 4,204,036) and further in view of Hollingsworth (US Patent 2,930,857).**

**Claim 7** is limited to "a hearing aid." Penn discloses a hearing aid apparatus that corresponds to the recited "system." In the embodiment of figure 2 a plurality of "electronic devices" including devices 10, 12, 12a and 13 receive "different supply voltages" provided by batteries 15, 19, 20, 24 and others not specifically labeled. Figure 2 clearly depicts that a respective battery provides each different supply voltage instead of "a single supply source having multiple voltage taps to provide the different supply voltages." However, this deficiency is overcome by an obvious modification.

In particular, Cohen teaches a multiple duty battery that, as described in the Abstract, provides different voltages by providing electrical access to intermediate cells

within the battery by conductive metal terminal layers. These layers correspond to the "multiple voltage taps" recited. Clearly, a single battery with a plurality of voltage providing cells generates a plurality of voltages without "up-converting" or "down-converting." Cohen further teaches that the multiple duty battery is advantageous in replacing multiple single duty batteries for use in a portable device, e.g. a hearing aid. See column 1, lines 4-50.

Claim 7 further requires "a housing containing the plurality of electronic devices and the single-supply source, the housing structured to mount in or about an ear of a person." Penn simply does not disclose the type of housing used for his hearing aid. Again, an obvious modification is required.

Hollingsworth discloses "a housing" for a hearing aid, namely the spectacles seen in figures 1-8, "containing the plurality of electronic devices and the...supply source," as seen in figures 3 and 4, "the housing structured to mount in or about an ear of a person" by virtue of the fact that they are spectacles. See figures 1 and 2. Comparing figure 9 of Hollingsworth to figure 2 of Penn makes it clear that incorporating the hearing aid of Penn into the spectacles housing of Hollingsworth is feasible.

It would have been obvious to one of ordinary skill in the art at the time of the invention to replace multiple batteries of a hearing aid with a single multiple duty battery as taught by Cohen for the purpose of simplifying the construction and reducing the size of the hearing aid. Moreover, it would have been obvious to embody the hearing aid apparatus of Penn in a pair of spectacles as taught by Hollingsworth simply because Penn fails to describe how one would contain the hearing aid and because

Hollingsworth spectacles serve as an inconspicuous hearing aid. See column 1, lines 15-29.

**Claim 2** is limited to "the hearing aid of claim 1," as covered by Penn in view of Cohen and further in view of Hollingsworth. As shown apropos the rejection of claim 1, Cohen teaches a multiple duty "battery" with conductive metal terminals (i.e. "multiple voltage taps"). These terminals are depicted, for example, in figure 5 as elements 24, 25 and 28. See column 4, line 12, through column 5, line 45. Therefore, Penn in view of Cohen and further in view of Hollingsworth makes obvious all limitations of the claim.

**Claim 3** is limited to "the hearing aid of claim 2," as covered by Penn in view of Cohen and further in view of Hollingsworth. Figure 5 depicts a plurality of "battery regions" that each include a cathode 31 and an anode 32. The "battery regions" are stacked on a "common substrate" corresponding to element 30. Alternatively, the "common substrate" corresponds to element 25. Therefore, Penn in view of Cohen and further in view of Hollingsworth makes obvious all limitations of the claim.

**Claim 1** is limited to "the hearing aid of claim 3," as covered by Penn in view of Cohen and further in view of Hollingsworth. Element 25, which is integral with sheet 37, is made of "aluminum." See Cohen, column 4, lines 55-60. Therefore, Penn in view of Cohen and further in view of Hollingsworth makes obvious all limitations of the claim.

**Claim 4** is limited to "the hearing aid of claim 3," as covered by Penn in view of Cohen and further in view of Hollingsworth. In the initial sense indicated apropos the rejection of claim 3, the "common substrate" corresponds to element 30, a plastic current collector that is "rigidly" fixed in the planar configuration seen in figure 5.

Therefore, Penn in view of Cohen and further in view of Hollingsworth makes obvious all limitations of the claim.

**Claim 5** is limited to "the hearing aid of claim 3," as covered by Penn in view of Cohen and further in view of Hollingsworth. In the alternative sense indicated apropos the rejection of claim 3, the "common substrate" corresponds to element 25, a flexible piece of steel "folded" into the configuration seen in figure 5. Therefore, Penn in view of Cohen and further in view of Hollingsworth makes obvious all limitations of the claim.

**Claim 6** is limited to "the hearing aid of claim 3," as covered by Penn in view of Cohen and further in view of Hollingsworth. In the alternative sense indicated apropos the rejection of claim 3, the "common substrate" corresponds to element 25, a flexible piece of steel "rolled" over frame 34 in the manner seen in figure 5. Therefore, Penn in view of Cohen and further in view of Hollingsworth makes obvious all limitations of the claim.

**Claim 10** is limited to "the hearing aid of claim 7," as covered by Penn in view of Cohen and further in view of Hollingsworth. Note that figure 3 of Penn illustrates batteries with one, two, three and four cells. Therefore, figure 3 of Penn clearly illustrates the need for at least four different voltages. As a result, it would have been obvious to one of ordinary skill in the art at the time of the invention to design the battery of Cohen to provide four voltages, necessitating four taps and four regions, for the purpose of meeting the voltage requirements of Penn.

**Claim 16** is limited to "the hearing aid of claim 7," as covered by Penn in view of Cohen and further in view of Hollingsworth. The hearing aid of Penn clearly includes "a

microphone" 10, "a signal processor" including elements 12, 17 and 18 and "an amplifier" 12a. As seen in figure 3 of Penn, each element listed above receives a different voltage, such that the different voltage taps of the battery taught by Cohen will power each different element. Therefore, Penn in view of Cohen and further in view of Hollingsworth makes obvious all limitations of the claim.

**Claim 19** is limited to "a hearing aid." Penn discloses a hearing aid apparatus that corresponds to the recited "system." In the embodiment of figure 2 a plurality of "electronic devices" including devices 10, 12, 12a and 13 receive "different supply voltages" provided by batteries 15, 19, 20, 24 and others not specifically labeled. Figure 2 clearly depicts that a respective battery provides each different supply voltage instead of "a single supply source having multiple voltage taps to provide the different supply voltages." However, this deficiency is overcome by an obvious modification.

In particular, Cohen discloses "a substrate" (lower end of 24), "a plurality of battery regions" including cathodes 31 and anodes 32; "a plurality of buffer regions" 15; and "a plurality of voltage taps" 25, 28 and the upper end of 24.

Claim 7 further requires "a housing containing the plurality of electronic devices and the single-supply source, the housing structured to mount in or about an ear of a person." Penn simply does not disclose the type of housing used for his hearing aid. Again, an obvious modification is required.

Hollingsworth discloses "a housing" for a hearing aid, namely the spectacles seen in figures 1-8, "containing the plurality of electronic devices and the...supply source," as seen in figures 3 and 4, "the housing structured to mount in or about an ear

of a person" by virtue of the fact that they are spectacles. See figures 1 and 2. Comparing figure 9 of Hollingsworth to figure 2 of Penn makes it clear that incorporating the hearing aid of Penn into the spectacles housing of Hollingsworth is feasible.

It would have been obvious to one of ordinary skill in the art at the time of the invention to replace multiple batteries of a hearing aid with a single multiple duty battery as taught by Cohen for the purpose of simplifying the construction and reducing the size of the hearing aid. Motivation to do so comes explicitly from Cohen. See column 1, lines 4-50. Moreover, it would have been obvious to embody the hearing aid apparatus of Penn in a pair of spectacles as taught by Hollingsworth simply because Penn fails to describe how one would contain the hearing aid and because Hollingsworth spectacles serve as an inconspicuous hearing aid. See column 1, lines 15-29.

**Claim 21** is limited to "the battery of claim 19," as covered by Penn in view of Cohen and further in view of Hollingsworth. Figure 5 clearly depicts that metal substrate 24 is flexible and folded about the battery regions. Therefore, Penn in view of Cohen and further in view of Hollingsworth makes obvious all limitations of the claim.

**Claim 25** is limited to "the battery of claim 19," as covered by Penn in view of Cohen and further in view of Hollingsworth. Cohen discloses a reference contact 6 that is common to all battery regions. Therefore, Penn in view of Cohen and further in view of Hollingsworth makes obvious all limitations of the claim.

**Claim 28** is limited to "a method of manufacturing a hearing aid." It was shown apropos the rejection of claim 7 that it is obvious to provide electronic devices configured to operate under a different supply voltage and a single supply source to

provide said supply voltages without up-converting or down-converting a voltage. However, Penn, which is directed towards a hearing aid, is silent regarding the absolutely necessary process of hearing aid manufacture. Therefore, Penn in view of Cohen fail to make obvious "mounting a number of electronic devices into a housing of a hearing aid." However, this deficiency is overcome by an obvious modification.

As noted in the previous paragraph, Penn fails to specify a method of hearing aid manufacture. Furthermore, Penn fails to even specify a particular housing for the hearing aid disclosed therein. These deficiencies may be simply overcome by choosing any suitable hearing aid housing and manufacturing method. In this way, the hearing aid taught by Hollingsworth provides "a housing" for a hearing aid, namely the spectacles seen in figures 1-8, "containing the plurality of electronic devices and the...supply source," as seen in figures 3 and 4, "the housing structured to mount in or about an ear of a person" by virtue of the fact that they are spectacles. See figures 1 and 2. Comparing figure 9 of Hollingsworth to figure 2 of Penn makes it clear that incorporating the hearing aid of Penn into the spectacles housing of Hollingsworth is feasible.

It would have been obvious to one of ordinary skill in the art at the time of the invention to embody the hearing aid apparatus of Penn in a pair of spectacles as taught by Hollingsworth simply because Penn fails to describe how one would contain the hearing aid and because Hollingsworth spectacles serve as an inconspicuous hearing aid. See column 1, lines 15-29.

**Claims 29-33** are directed towards essentially the same subject matter as claims 2-6, and are rejected for the same reasons.

3. **Claims 12, 14, 17, 18 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Penn in view of Cohen and further in view of Saaski et al. (US Patent 6,310,960).**

**Claim 12** is limited to "the hearing aid of claim 7," as covered by Penn in view of Cohen and further in view of Hollingsworth. Penn is silent regarding "a battery recharge control." However, this deficiency is overcome by an obvious modification.

In particular, Saaski teaches a rechargeable hearing aid system as stated in the Abstract. The Abstract indicates that the recharging circuit is applicable to batteries with multiple cells, such as the one taught by Cohen. The battery recharge control of Saaski is depicted in figures 5 and 6. See column 14, line 18, through column 16, line 8.

It would have been obvious to one of ordinary skill in the art at the time of the invention to (1) design the battery of Cohen to be rechargeable and (2) provide a battery recharge control as taught by Saaski for the purpose of overcoming problems inherent in using disposable batteries. See Saaski column 1, line 63, through column 2, line 36.

**Claim 14** is limited to "the hearing aid of claim 12," as covered by Penn in view of Cohen in view of Hollingsworth and further in view of Saaski. Saaski discloses a voltage regulator that provides a design charging voltage in column 16, lines 3-8. The circuitry (not shown) that provides this function corresponds to "a number of voltage regulators" as recited, wherein the number is one. Therefore, Penn in view of Cohen in view of Hollingsworth and further in view of Saaski makes obvious all limitations of the claim.

**Claim 17** is limited to "the hearing aid of claim 7," as covered by Penn in view of Cohen and further in view of Hollingsworth. Penn is silent regarding "one or more regulators." However, this deficiency is overcome by an obvious modification.

Saaski teaches regulating one battery voltage in figure 7. See column 16, lines 30-50. The regulator functions to maintain a constant DC voltage output regardless of the amount of power discharged by the battery.

It would have been obvious to one of ordinary skill in the art at the time of the invention to regulate the output of at least one battery voltage provided by one tap of a battery as taught by Saaski for the purpose of maintaining a constant DC voltage regardless of the amount of power discharged by the battery.

**Claim 18** is limited to "the hearing aid of claim 7," as covered by Penn in view of Cohen and further in view of Hollingsworth. The recharging circuit of Saaski mentioned apropos the rejection of claim 12 operates at a voltage of about 3-8 volts. See column 15, lines 6-7.

It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the recharging circuit as taught by Saaski for the same reasons apropos the rejection of claim 12.

**Claim 34** is limited to "the method of claim 29," as covered by Penn in view of Cohen and further in view of Hollingsworth. The recharging circuit of Saaski mentioned apropos the rejection of claim 12 operates at a voltage of about 3-8 volts. See column 15, lines 6-7.

It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the recharging circuit as taught by Saaski for the same reasons apropos the rejection of claim 12.

4. **Claims 19-24, 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Penn in view of LaFollette et al. (US Patent 6,610,440) in view of Cohen and further in view of Hollingsworth (US Patent 2,930,857).**

**Claim 19** is limited to “a hearing aid.” Penn discloses a hearing aid apparatus that corresponds to the recited “system.” In the embodiment of figure 2 a plurality of “electronic devices” including devices 10, 12, 12a and 13 receive “different supply voltages” provided by batteries 15, 19, 20, 24 and others not specifically labeled. Figure 2 clearly depicts that a respective battery provides each different supply voltage instead of “a single supply source having multiple voltage taps to provide the different supply voltages.” However, this deficiency is overcome by an obvious modification.

In particular, LaFollette discloses microscopic batteries for MEMS systems. See Abstract. As seen in, for example, figure 10 a battery includes a plurality of micro cells that corresponds to “a plurality of battery regions” disposed on a silicon substrate, such as the substrate 32 seen in figure 6. The cross-section of figure 6 depicts polyimide spacers 38’ (i.e. buffer regions) that separate each electrolyte/micro cell (i.e. battery region). Both figure 6 and figure 10 illustrate a plurality of electrodes that serve as “a plurality of voltage taps.” As seen in figure 10, each cell has a tap. See column 25, line 20, through column 26, line 36.

Claim 7 further requires "a housing containing the plurality of electronic devices and the single-supply source, the housing structured to mount in or about an ear of a person." Penn simply does not disclose the type of housing used for his hearing aid. Again, an obvious modification is required.

Hollingsworth discloses "a housing" for a hearing aid, namely the spectacles seen in figures 1-8, "containing the plurality of electronic devices and the...supply source," as seen in figures 3 and 4, "the housing structured to mount in or about an ear of a person" by virtue of the fact that they are spectacles. See figures 1 and 2. Comparing figure 9 of Hollingsworth to figure 2 of Penn makes it clear that incorporating the hearing aid of Penn into the spectacles housing of Hollingsworth is feasible.

It would have been obvious to one of ordinary skill in the art at the time of the invention to replace multiple batteries of a hearing aid with a single multiple duty battery as taught by LaFollette for the purpose of simplifying the construction and reducing the size of the hearing aid. Motivation to do so comes explicitly from Cohen. See column 1, lines 4-50. Moreover, it would have been obvious to embody the hearing aid apparatus of Penn in a pair of spectacles as taught by Hollingsworth simply because Penn fails to describe how one would contain the hearing aid and because Hollingsworth spectacles serve as an inconspicuous hearing aid. See column 1, lines 15-29.

Claim 20 is limited to "the battery of claim 19," as covered by Penn in view of LaFollette in view of Cohen and further in view of Hollingsworth. LaFollette discloses that the substrate 32 is "rigid." See column 13, lines 9-35. Therefore, Penn in view of

LaFollette in view of Cohen and further in view of Hollingsworth makes obvious all limitations of the claim.

**Claim 21** is limited to "the battery of claim 19," as covered by Penn in view of LaFollette in view of Cohen and further in view of Hollingsworth. LaFollette discloses that the substrate is "flexible" and spirally-wound (i.e. "folded"). See column 13, lines 9-35, and figure 16. Therefore, Penn in view of LaFollette in view of Cohen and further in view of Hollingsworth makes obvious all limitations of the claim.

**Claim 22** is limited to "the battery of claim 19," as covered by Penn in view of LaFollette in view of Cohen and further in view of Hollingsworth. LaFollette discloses that the substrate is "flexible" and spirally-wound (i.e. "rolled"). See column 13, lines 9-35, and figure 16. Therefore, Penn in view of LaFollette in view of Cohen and further in view of Hollingsworth makes obvious all limitations of the claim.

**Claim 23** is limited to "the battery of claim 19," as covered by Penn in view of LaFollette in view of Cohen and further in view of Hollingsworth. LaFollette depicts at least three battery regions in figure 10. Therefore, Penn in view of LaFollette in view of Cohen and further in view of Hollingsworth makes obvious all limitations of the claim.

**Claim 24** is limited to "the battery of claim 19," as covered by Penn in view of LaFollette in view of Cohen and further in view of Hollingsworth. The voltages provided by the micro cells depicted in figure 10 of LaFollette are approximately 1.3V, 2.6V and 3.8V. Therefore, Penn in view of LaFollette in view of Cohen and further in view of Hollingsworth makes obvious all limitations of the claim.

**Claim 26** is limited to "the battery of claim 19," as covered by Penn in view of LaFollette in view of Cohen and further in view of Hollingsworth. Figure 10 of LaFollette clearly depicts that each battery region has its own "reference contact." Therefore, Penn in view of LaFollette in view of Cohen and further in view of Hollingsworth makes obvious all limitations of the claim.

**Claim 27** is limited to "the battery of claim 19," as covered by Penn in view of LaFollette in view of Cohen and further in view of Hollingsworth. LaFollette disclose that each micro cell is "rechargeable." See column 15, lines 29-38. Therefore, Penn in view of LaFollette in view of Cohen and further in view of Hollingsworth makes obvious all limitations of the claim.

#### ***Response to Arguments***

Applicant's arguments with respect to claims 1-34 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Walter F. Briney III whose telephone number is 571-272-7513. The examiner can normally be reached on M-F 8am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on 571-272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

wfb  
3/15/07

  
SINH TRAN  
SUPERVISORY PATENT EXAMINER